From: Paige Delgado
To: Gibbs, Larry D CIV USARMY PEO AMMO (US)
Cc: John.Porter@dps.la.gov
Subject: RE: EXPLO Systems
Date: 12/17/2012 09:48 AM

Thank you for the attached information about the APE 1995. Do you have SOPs for the proper sampling of propellant with this instrumentation? Also, I know the LSP is grateful for the arrival of the instrumentation and technicians at EXPLO today.

Thanks again,

Paige Delgado
Federal On-Scene Coordinator
Prevention and Response Branch (6SF-PO)
U.S. EPA Region VI
Office: 214.665.2724
Cell: 469.371.2529

▼ "Gibbs, Larry D CIV USARMY PEO AMMO (US)" ---12/17/2012 06:36:57 AM---Hi Paige: The attached information was provided to the on-site LSP investigation team Friday afterno

From: "Gibbs, Larry D CIV USARMY PEO AMMO (US)" <larry.d.gibbs2.civ@mail.mil>
To: Paige Delgado/R6/USEPA/US@EPA
Date: 12/17/2012 06:36 AM
Subject: RE: EXPLO Systems

Hi Paige:

The attached information was provided to the on-site LSP investigation team Friday afternoon, 14 December.

Larry
(973) 724-8702

-----Original Message-----
From: Delgado.Paige@epamail.epa.gov [mailto:Delgado.Paige@epamail.epa.gov]
Sent: Friday, December 14, 2012 3:11 PM
To: Gibbs, Larry D CIV USARMY PEO AMMO (US)
Subject: Re: EXPLO Systems

Thanks Larry! I look forward to it!

Paige Delgado
Federal On-Scene Coordinator
Prevention and Response Branch (6SF-PO)
Office: 214.665.2724
Cell: 469.371.2529

----- Original Message -----
From: "Gibbs, Larry D CIV USARMY PEO AMMO (US)" [larry.d.gibbs2.civ@mail.mil]
Sent: 12/14/2012 08:05 PM GMT
To: Paige Delgado
Subject: RE: EXPLO Systems

Hi Paige:

I'm working but unsure if I'll get a response today.

Take care,
Larry

-----Original Message-----
From: Delgado.Paige@epamail.epa.gov
[mailto:Delgado.Paige@epamail.epa.gov]
Sent: Friday, December 14, 2012 2:10 PM
To: Gibbs, Larry D CIV USARMY PEO AMMO (US)
Subject: EXPLO Systems

Larry,

Please send me any information you have on the equipment we discussed on the conference call that can assess the degradation and properties of demolitions. A name, any specifics (manufacturer, model, etc.), and any SOPs on sampling would be greatly appreciated.

I look forward to hearing from you and working with you on the Camp Minden situation.

Thanks

Paige Delgado
Federal On-Scene Coordinator
Prevention and Response Branch (6SF-PO)
U.S. EPA Region VI
Office: 214.665.2724
Cell: 469.371.2529

----- Message from "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil> on Sat, 15 Dec 2012 16:30:05 +0000 -----

To: "john.porter@dps.la.gov" <john.porter@dps.la.gov>, "shelly.hopkins@dps.la.gov" <shelly.hopkins@dps.la.gov>

cc: "Zelnio, Gregory P CIV (US)" <gregory.p.zelnio.civ@mail.mil>, "Manecke, Larry D CIV (US)" <larry.d.manecke.civ@mail.mil>, "Beaver, Jerry W CIV (US)" <jerry.w.beaver.civ@mail.mil>, "Gibbs, Larry D CIV USARMY PEO AMMO (US)" <larry.d.gibbs2.civ@mail.mil>, "Olson, Gregory W CIV (US)" <gregory.w.olson10.civ@mail.mil>, "Brewer, Raymond L Sr CIV (US)" <raymond.l.brewer2.civ@mail.mil>, "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil>

Subject: FW: APE 1995s (UNCLASSIFIED)

Officers Porter & Hopkins - Two technicians will depart

McAlester, OK Monday
December 17th at approximately 0600 for Camp Minden, LA. The technicians,
Messrs Jimmy Shaw and Will Grevel, should be on location around 1200 on the
17th. They have been instructed that you two are their POCs and have been
provided your contact information. They will have 2 sets of manuals for
each of the two NIR units and have hand receipt documentation for the
transfer to your custody. Starting Monday they will deliver the units,
setup each unit, and begin training your users on the operation of the NIR
technology. Intent is to be on location until Friday, December 21st when
they will return to McAlester. Contact information for Messrs Shaw and
Grevel are as follows:

Shaw - 918-424-7513
Grevel - 918-916-0659

I will update as more information becomes available. -- Rich Fuller

Richard L. Fuller, Jr.
Chief, Demil & APE Mgmt Division
HQ, Joint Munitions Command
richard.l.fuller32.civ@mail.mil
309.782.6306

[attachment "smime.p7s" deleted by Paige Delgado/R6/USEPA/US]

----- Message from "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil> on Fri, 14 Dec 2012 21:16:19 +0000 -----

To: "shelly.hopkins@dps.la.gov" <shelly.hopkins@dps.la.gov>, "john.porter@dps.la.gov" <john.porter@dps.la.gov>

cc: "Zelnio, Gregory P CIV (US)" <gregory.p.zelnio.civ@mail.mil>, "Manecke, Larry D CIV (US)" <larry.d.manecke.civ@mail.mil>, "Gibbs, Larry D CIV USARMY PEO AMMO (US)" <larry.d.gibbs2.civ@mail.mil>, "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil>, "Beaver, Jerry W CIV (US)" <jerry.w.beaver.civ@mail.mil>, "Brewer, Raymond L Sr CIV (US)" <raymond.l.brewer2.civ@mail.mil>, "Olson, Gregory W CIV (US)" <gregory.w.olson10.civ@mail.mil>, "McCall, Barry C CIV (US)" <barry.c.mccall.civ@mail.mil>

Subject: Deployment of Equipment in Support of Operations at Camp Minden

Officers Hopkins and Porter - The HQ, Joint Munitions Command will be deploying personnel and equipment in support of the Louisiana State Police clean-up operation at Camp Minden. Two technicians and two Ammunition Peculiar Equipment M1995 Near Infra Red Propellant Analyzers (see attachment) will depart McAlester OK early Monday, December 17th. They will have your contact information and will be instructed to report to you upon arrival at Camp Minden. Following equipment set-up and training, these units will need to be added to your property hand receipt, a copy of which will need to be provided to the technicians. My office will provide the names of the individuals, their anticipated arrival time, and additional information Monday morning. More to come. -- Rich Fuller

Richard L. Fuller, Jr.
Chief, Demil & APE Mgmt Division
HQ, Joint Munitions Command
richard.l.fuller32.civ@mail.mil
309.782.6306

----- Message from "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil> on Fri, 14 Dec 2012 20:49:35 +0000 -----

To: "shelly.hopkins@dps.la.gov" <shelly.hopkins@dps.la.gov>, "john.porter@dps.la.gov" <john.porter@dps.la.gov>

cc: "Zelnio, Gregory P CIV (US)" <gregory.p.zelnio.civ@mail.mil>, "Manecke, Larry D CIV (US)" <larry.d.manecke.civ@mail.mil>, "Gibbs, Larry D CIV USARMY PEO AMMO (US)" <larry.d.gibbs2.civ@mail.mil>, "Brewer, Raymond L Sr CIV (US)" <raymond.l.brewer2.civ@mail.mil>, "Dawson, Carolyn S CIV (US)" <carolyn.s.dawson.civ@mail.mil>, "Fuller, Richard L Jr CIV (US)" <richard.l.fuller32.civ@mail.mil>

Subject: M6 propellant stability questions

Officers Hopkins and Porter - The information in this e-mail message and the attached MS Powerpoint briefing is in response to your request for information on M6 propellant. This information was collected by our Ammunition Surveillance organization. It may go into more detail than you need but we believe it may be of assistance to your operation. If you or your organization has any questions, please call or e-mail. -- Rich

Richard L. Fuller, Jr.
Chief, Demil & APE Mgmt Division
HQ, Joint Munitions Command
richard.l.fuller32.civ@mail.mil
309.782.6306

-----Original Message-----
From: Hawver, Matthew M CIV USARMY JMC (US)
[mailto:matthew.m.hawver.civ@mail.mil]
Sent: Wednesday, December 12, 2012 12:26 PM
To: Garton, Christopher A CIV (US)
Cc: Walsh, Michael P CIV (US)
Subject: FW: M6 propellant stability questions
Importance: High

Chris,

Please see the information from Dr. Bixon, ARDEC-RDAR-QES-B, provided in the email below and in the attachment regarding propellant exposed to moisture and heat over an extended period of time. After conversations with Nathan Zink, Chemist APSL, and Dr. Bixon I have been informed that single base propellant, such as M6, exposed to these conditions does accelerate the rate of stabilizer depletion. Rates of depletion can vary but the attached study gives you an idea of the stabilizer depletion that occurs. Let me know if you need anything else of have any questions, thanks.

I have converted the temps that the propellant was exposed to during the study and provided it below for you:
50ºC = 122.00ºF
60ºC = 140.00ºF
70ºC = 158.00ºF
80ºC = 176.00ºF

As a footnote, (U) 2,4-dinitrotoluene is contained in M6 propellant at a level between 8-12% and is "known to the State of California to cause cancer". Otherwise it is listed by the EPA as toxic.

M6 Formulation:
Nitrocellulose: 87.00 +/- 2.00
Dinitrotoluene: 10.00 +/- 2.00
Dibutyl Phthalate: 3.00 +/- 1.00
Diphenylamine: 1.00 +/- .20/0.10 added
Potassium sulfate: 1.00 +/- 0.30 added

V/R,

Matt Hawver
QASAS
Joint Munitions Command
Ammunition Surveillance Division
Propellant Stability Program Manager
Ammunition Trace Request Manager
Functional Clearance Request Manager
Ammunition Lot Suffix Coordinator
DSN: 312-793-3154 Comm: 309-782-3154
Email: matthew.m.hawver.civ@mail.mil

"No good decision was ever made in a swivel chair."
~ Gen. George S. Patton, Jr.

-----Original Message-----
From: Bixon, Eric R CIV (US)
Sent: Wednesday, December 12, 2012 9:57 AM
To: Hawver, Matthew M CIV USARMY JMC (US)
Cc: Grau, Henry A CIV (US)
Subject: RE: M6 propellant stability questions

Hi,

M6 is a single base propellant similar in composition to the propellant that I have provided in the enclosed paper. The effect of the direct sunlight is to heat up the propellant. Also, the moisture adversely effects the stability. Heat and moisture accelerate the decomposition.

If you have a RES of .31 to .49, that should help you. In a year if it was very hot, and the propellants were exposed directly, you could have lost even that level of RES. It would be best to have samples from a few of the drums analyzed here at Picatinny. That would provide a current stabilizer level for the RES. If the RES was zero, that wouldn't be too good.

Certainly the pallets and propellant sitting in drums should be inspected for signs of fuming, smoke or any other indication of heat buildup, prior to any sampling or moving of the drums.

Since the propellant is in large diameter drums, the potential for heat build up and autoignition exists.

If the temperature inside the middle of the drums is the same as ambient. It should be. Then that is a good sign.

Let me know if this helps you or if you have any questions or if you want me to get you a place to send samples taken by a QASAS.

A multi-drum selection from the middle of the drums for propellant HPLC analysis would be good. Keep the samples separate, and let me know if you need anything.

Regards,

Eric

-----Original Message-----
From: Hawver, Matthew M CIV USARMY JMC (US)
Sent: Wednesday, December 12, 2012 10:19 AM
To: Bixon, Eric R CIV (US)
Cc: Garton, Christopher A CIV (US)
Subject: M6 propellant stability questions
Importance: High

Mr. Bixon,

Per our discussion, could you please advise as to what effect

inclement weather would have on stabilizer content of M6 propellant in plastic liners inside of cardboard containers on pallets. This M6 propellant has been stored outside exposed to moisture and in the direct sunlight. Could this environment lead to excessive deterioration of the propellant stabilizer during the summer months. I don't like using hypothetical situations, but I think this situation requires it. Say, for instance, that M6 propellant was already a low category A (in the .31 to .49 range) when it shipped to the current location over a year ago. In your expert opinion, what would be the relative cause of concern or probability of auto ignition? What is your level of confidence that that propellant could remain stable not auto ignite at any given time? Also, do you have any scientific data as to how propellant stabilizer behaves or depletes when exposed to direct sunlight and moisture. I apologize, but given the current situation time is of the essence and any helpful information would be appreciated ASAP. Please give me a call if you have additional questions and I appreciate your time regarding this matter, thank you.

V/R,

Matt Hawver
QASAS
Joint Munitions Command
Ammunition Surveillance Division
Propellant Stability Program Manager
Ammunition Trace Request Manager
Functional Clearance Request Manager
Ammunition Lot Suffix Coordinator
DSN: 312-793-3154 Comm: 309-782-3154
Email: matthew.m.hawver.civ@mail.mil

"No good decision was ever made in a swivel chair."
~ Gen. George S. Patton, Jr.

[attachment "SINGLE BASE PROPELLANT_BIXON_2481 14Dec12.pptx" deleted by Paige Delgado/R6/USEPA/US] [attachment "APE 1995 (Foss) NIR Data Sheet Dec12.pdf" deleted by Paige Delgado/R6/USEPA/US]